

IN THE CLAIMS

Please cancel original claims 1-14 and add new claims 15-34 under the provisions of 37 CFR §1.121(c)(1)(i) so that they appear as follows:

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- 15. (new) A method for isolating a nucleic acid from a biological sample comprising the steps of:
- (a) providing an extraction buffer comprising a phenol-neutralizing substance, wherein said extraction buffer
 - (i) has a pH from about 2 to about 8, and
 - (ii) has a salt concentration of at least about 100 mM;
 - (b) contacting said extraction buffer with a biological sample containing nucleic acid, and contacting said biological sample with an adsorption matrix; and
 - (c) isolating said nucleic acid from said adsorption matrix. --
- 16. (new) The method of claim 15, wherein said extraction buffer has a pH from about 4 to about 6.5. --
- 17. (new) The method of claim 15, wherein said extraction buffer comprises at least one salt from the group consisting of KCl and NaCl. --
- 18. (new) The method of claim 15, wherein said phenol-neutralizing substance comprises at least about 0.5% polyvinylpyrrolidone. --
- 19. (new) The method of claim 15, wherein said adsorption matrix comprises an insoluble carbohydrate. --
- 20. (new) The method of claim 19, wherein said adsorption matrix comprises a component of potato flour. --
- 21. (new) The method of claim 15, wherein said biological sample comprises fecal material. --

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- 22. (new) The method of claim 15, wherein said extraction buffer is incubated with said biological sample before contacting said extraction buffer and said biological sample with said adsorption matrix. --
- 23. (new) The method of claim 22, wherein said incubation occurs at a temperature of less than or equal to about 10°C. --
- 24. (new) The method of claim 22, wherein said incubation comprises at least one treatment regime selected from the group consisting of chemical treatment, thermal treatment, and enzymatic treatment. --
- 25. (new) The method of claim 22, wherein said incubation occurs at a temperature of greater than or equal to about 50°C. --
- 26. (new) The method of claim 15, wherein contacting said biological sample with said adsorption matrix occurs under at least one physical condition selected from the group consisting of centrifugation, reduced pressure, and gravity. --
- 27. (new) The method of claim 24, wherein contacting said biological sample with said adsorption matrix occurs under at least one physical condition selected from the group consisting of centrifugation, reduced pressure, and gravity. --
- 28. (new) An extraction buffer useful to isolate a nucleic acid from a biological sample comprising a phenol-neutralizing substance, wherein said extraction buffer
- (i) has a pH from about 2 to about 8, and
 - (ii) has a salt concentration of at least about 100 mM. --
- 29. (new) The extraction buffer of claim 28, wherein said extraction buffer has a pH from about 4 to about 6.5. --
- 30. (new) The extraction buffer of claim 28, wherein said extraction buffer comprises at least one salt from the group consisting of KCl and NaCl. --

--31. (new) The extraction buffer of claim 28, wherein said phenol-neutralizing substance comprises at least about 0.5% polyvinylpyrrolidone. --

--32. (new) A kit for isolating a nucleic acid from a biological sample comprising:

- (a) an extraction buffer according to any one of claims 28-31, and
- (b) an adsorption matrix. --

--33. (new) The kit of claim 32, wherein said adsorption matrix comprises an insoluble carbohydrate. --

--34. (new) The kit of claim 33, wherein said adsorption matrix comprises a component of potato flour. --

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